

SHIP SYSTEM	SUBSYSTEM	MRC CODE  R-	
SYSTEM Remote Operating Gear	EQUIPMENT Electrical Motor Operated Valve	RATES GS-11/12	M/H 24.0
MAINTENANCE REQUIREMENT DESCRIPTION 1. Conduct SEMAT assessment of valve operator. 2. Conduct SEMAT assessment of valve. 3. Test operate valve operator and valve.		TOTAL M/H 24.0 ELAPSED TIME	
SAFETY PRECAUTIONS 1. Forces afloat comply with NAVOSH Program Manual for Forces Afloat, OPNAVINST 5100.19 series. 2. Ensure valve can be operated without disrupting equipment, plant, or system operation and will not cause flooding.			
TOOLS, PARTS, MATERIALS, TEST EQUIPMENT <b>MATERIALS</b> 1. [0866] Marker, tube type 2. [1102] Rags, wiping 2. [1170] Mirror, inspection 3. [2271] Flashlight, Type 3, style 1, explosive proof 4. [3886] Screwdriver, flat tip, 6" <b>TOOLS</b> 1. [0608] Hammer, hand, Machinist's ball peen, 24 OZ, nonsparking <b>MISCELLANEOUS</b> 1. Radio, Walkie-Talkie (2) <b>NOTE:</b> Numbers in brackets can be referenced to Standard PMS Materials Identification Guide (SPMIG) for stock number identification.			
PROCEDURE <b>NOTE 1:</b> Two assessors and man-hour assigned are average for DD class ships and may require adjustment for larger class of ship.		PAGE 1 OF 3	
DISTRIBUTION STATEMENT D Distribution authorized to DOD components and DOD contractors only; critical technology; August 1997. Other requests for this document shall be referred to Naval Sea Systems Command (SEA 04TD). Destroy by any method that will prevent disclosure of contents or reconstruction of the document.		87	
		AAAA	
		N	
LOCATION	DATE August 1997		

PROCEDURE (Contd)

**Preliminary**

- a. Compile the following documents before going on-board ship.
  - (1) From the Damage Control Book, obtain a list of remote operated valves. The valve list should indicate:
    - (a) System
    - (b) Valve Number
    - (c) Valve Location
    - (d) Function
    - (e) Control Panel location
    - (f) Kind of valve
    - (g) Valve size
    - (h) Valve type
    - (i) Responsible Division
    - (j) Damage Control Classification
  - (2) Copy of EOSS Diagram that shows the complete ROG for each system.
- b. Accomplish the following on-board ship:
  - (1) Review SEMAT 2-Kilos and ships CSMP reports. Add additional information if required and close out 2-Kilos/CSMP reports that are completed.
  - (2) Contact ship's force in CCS to obtain two (2) Portable Radios and two (2) people from S/F to cycle valves.

**NOTE 2:** It is mandatory that ship's force personnel are present to cycle valves.

**1. Conduct SEMAT Assessment of Valve Operator.**

- a. Assess valve operators' external operator linkage for; cracks, breaks, and loose or missing fasteners.
- b. Assess wiring for; broken conductors, cracks, cuts, and frayed insulation.
- c. Assess electrical and mechanical connections for tightness.
- d. Check for any missing label plates DC number, valve number, valve designation, and DC classification at the remote location and adjacent to the valve.
- e. Assess cover gasket for; cuts, tears, and distortion.

**2. Conduct SEMAT Assessment of Valve.**

- a. Assess all exterior surfaces of the valve for; rust, corrosion, cracks, nicks, visible bent condition, and broken threads.
- b. Check for any missing label plates DC number, valve number, valve designation, and DC classification at the remote location and adjacent to the valve.
- c. Assess all mounting bolts and nuts for; rust, corrosion, deterioration, any missing parts, and tightness.
- d. Assess handles and handwheel for; cracks, breaks, and loose or missing parts.
- e. Assess packing gland, gaskets, and seals for any signs of leaking.

PAGE 2 OF 3

AAA

N

PROCEDURE (Contd)

3. Test Operate Valve Operator and Valve.

**NOTE 3:** Assessors must establish communication between the remote station and the valve location before ship's force personnel cycle the valve.

**NOTE 4:** Before cycling any discharge or suction valve for fire pumps, check with CCS. Ensure main, secondary drain, and SW cooling valves are cycled in the correct order.

**WARNING:** Ensure valve can be operated without disrupting equipment, plant or system operation and will not cause flooding.

- a. Cycle the valve electrically both in the local and remote mode.
  - (1) Set remote station valve actuator switch in open position. Open indicator lights should light and mechanical indicator on valve should indicate fully open position, if indicators are applicable.
  - (2) Set remote station valve actuator switch in closed position. Closed indicator lights should extinguish. Mechanical indicator on valve should indicate fully closed position, if indicators are applicable.
  - (3) Assess coupling and shaft to ensure proper alignment and listen for abnormal or unusual noises, and any leaks.
- b. Cycle the valve manually.
  - (1) Manually open valve, open indicator lights should light and mechanical indicators on valve should indicate open, if indicators are applicable.
  - (2) Manually close valve, closed indicator lights should indicate closed, if indicators are applicable.
  - (3) Return system to readiness condition.
  - (4) Remove safety tag(s) from isolation valve(s), if applicable.
  - (5) Return system to readiness condition.

4. All discrepancies shall be noted on applicable discrepancy identification forms (i.e. 2-Kilos or Material Assessment Form).

PAGE 3 OF 3

AAAA

N